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ABSTRACT

Project SAVE (Student Action for Valuing the Environment) encourages a team approach to solving environmental problems. SAVE suggests that students initiate, create, and implement practical approaches to solving community environmental problems. Included in this publication are descriptions of 13 exemplary programs that include elementary schools, middle schools, a junior high school, and high schools. Also included are a list of suggestions for community projects and resources available to assist in problem solving. (RH)

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SE 022 131

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Project SAVE

Student Action
for Valuing the Environment

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Foreword

S.A.V.E. (Student Action for Valuing the Environment) has for several years encouraged educators and students in Indiana's schools to design action programs and projects to help solve energy and environmental problems. This publication shares several successful programs with you and at the same time encourages you and your students to develop similar activities in your school-community.

I challenge HOOSIER educators and students to organize a SAVE school-community action project which encourages student(s) initiative, creativeness and action. It will take the action of many students, educators and parents to SAVE an environment fit for future inhabitants of Indiana communities.

Dr. Harold H. Negley
State Superintendent

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These individuals contributed significantly
in the design of this publication:

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I. Rationale for Environmental Education

We are all passengers on a spacecraft which constantly moves through space; this spacecraft is Planet Earth. As we, (students, teachers and parents) rotate around the sun we carry with us limited amounts of natural resources. The resources we now have are all we will ever have. There is no present way of extending a pipe line into space and "piping in" oil, coal, precious metals, wildlife, forest products, soil and other life supporting resources.

The life support systems of this Spaceship Earth have been severely damaged. Valuable mineral resources such as lead, zinc and copper will soon be gone forever. Natural gas and oil resources which provide energy for cars, homes, schools and businesses will soon disappear. In addition, we have contaminated our air, water and soil supplies with pollutants which have created health problems in many communities in Indiana, other states and the world.

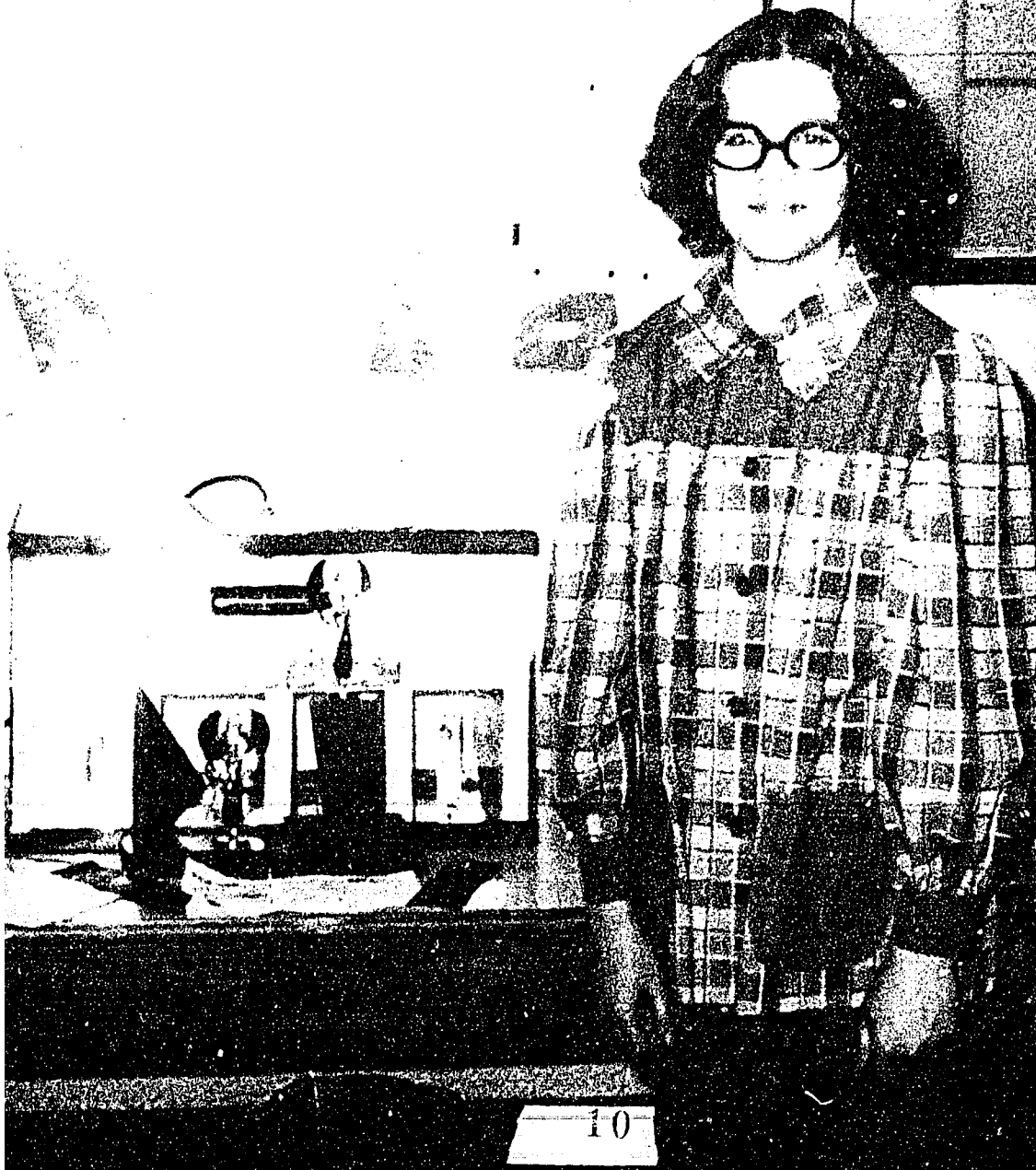
If man is to survive in a livable environment, action must be taken immediately to manage our life support systems more effectively. Environmental Education is a management or stewardship approach to solving community, state and world problems. Environmental Education is an interdisciplinary process approach which develops an **awareness** of environmental problems, an understanding of why they exist, and encourages student **action** to help solve them.

Environmental Education encourages students to hypothesize, infer, research, collect data, observe, record, and make conclusions about an environmental problem. By permitting students to use these process skills the classroom teacher becomes a facilitator rather than a dominator of learning environs. Working as a "team", teacher and students formulate action plans for solving some environmental problems.

Project S.A.V.E. (Student Action for Valuing the Environment) encourages a team approach to solving environmental problems. SAVE suggests that students initiate, create, and implement practical approaches to solving community environmental problems. Participation might involve just one student, a small group, a class, or an entire school. SAVE projects require educators and students to use many disciplines as they attempt to solve a community environmental problem. Science, social science, math, language arts, art, and reading are some areas of study which are used to investigate environmental issues.

SAVE, a program of the Indiana Department of Public Instruction, is the educational component of PRIDE, the Governor's conservation program. SAVE recognizes the environmental efforts of students, educators, and community members by presenting an award to each contributing individual. Outstanding SAVE projects are eligible for the PRIDE Community Award from the Governor's Indiana Energy Office.

TYPES
OF
INSULATION



II. Exemplary SAVE Projects

Project SAVE has proven that students can take responsible action and make an impact on solving local environmental problems. They can often influence the behavior of other students and adults and affect decisions that are made in the school and community.

Projects of previous years are described in order to share approaches and strategies that might be useful in other school communities.

The members of the Project SAVE Committee feel that these programs which were developed at various grade levels represent successful environmental approaches toward stewardship and environmental management.

**WAVERLY ELEMENTARY SCHOOL
MOORESVILLE
PAULA McKAY, TEACHER
GRADE 1**

Objective:

To develop an energy conscience among both students and adults.

Strategy:

Emphasis in the first grade at Waverly Elementary was placed upon an understanding of the interdependence of living things and the dependence on the sun for the generation of energy producing processes. As a means of providing for direct pupil experiences, each child had the following opportunities:

- *to plant and harvest his own garden
- *to visit the school boiler room and outside storage tank to determine how the classroom is heated
- *to maintain a checklist of practices that primary children could observe in order to save fuel at home
- *to become involved in an energy patrol in which school and home energy conservation practices were observed.

*to produce posters and reports advocating energy conservation

Children took a more active role in the encouragement of participation in energy conservation practices. As a result of their action, parents reported savings on home energy usage. The project also signalled a new commitment to community involvement with a number of individuals from the community volunteering both the time and resources necessary to make the gardening project a success. Through co-operative endeavors the Waverly Elementary first grade children and many members of the community worked toward the development of an energy conscience. Success and state recognition of the above energy project encouraged an all out effort by students, staff, parents and many community members during the second year SAVE project. Projects undertaken and completed included: 1) Air pollution plays, 2) Water quality investigations, 3) School site beautification projects, 6) Written essays on environmental degradation, 7) Soil investigations, etc.

Community support came from the P.T.O., construction companies, nurseries, local sanitary landfill and water treatment personnel, and the local news media.

**JEFFERSON ELEMENTARY
SCHOOL
GARY
ERSENA PRYOR, TEACHER
GRADE 2**

Objective:

To encourage students to become aware of the importance of utility conservation and to encourage students and parents to use utilities wisely.

Strategy:

The second grade class at Jefferson Elementary developed a project entitled "How to Stretch Utility Power". Students began their activities by gathering a variety of materials and information relative to the use of various utilities. Since the school has a bi-lingual program, the children wrote stories related to their experiences both in English and Spanish.

After students had a number of opportunities to learn about water and gas utilities, plans were made

to take a field trip to visit Northern Indiana Public Service Company. Prior to the trip students learned to read meters and were given a record sheet to record home readings during spring vacation. Following vacation the meter readings were discussed and students then read and signed a utility conservation pledge which focused on "home" energy conservation practices.

Students' participation in these activities was enthusiastic and receptive. The children readily identified the importance of utilities as they related to daily living. The activities also motivated parental involvement as many participated in the home utility conservation practices and/or accompanied the class on the NIPSCO visit. The project provided opportunities for parents and students to deal in a meaningful way with a problem which has significance for all individuals.

**SYRACUSE ELEMENTARY SCHOOL
SYRACUSE
LERA REINHOLT, TEACHER
GRADE 4**

Objective:

To develop a recycling program in response to the need to conserve paper and improve the litter problem.

Strategy:

Students initially engaged in data-gathering activities, uncovering statistics which further motivated them to take action. They tabulated the amount of paper towels, napkins, and straws wasted at the school, and found, for example, that girls were more wasteful with paper toweling than boys and fifth graders wasted 239 sheets of paper daily as compared to 13 for third graders. As a result, the students prepared posters and constructed a paper monster designed to motivate others in the school to take a responsible role in utilizing paper products.

The project did not end with data-gathering activities. Instead, the students became interested in the collection and recycling of newspapers. This prompted the class to seek community involvement and as a result enabled the class to collect and sell approximately 13 tons of newspapers. The money earned was used

to purchase playground equipment. More importantly, however, the project caused new behaviors to emerge. Mrs. Reinholt reported that a new sense of closeness among students developed; the teacher was perceived as a "human" who also contributed to the solution of a common problem. Community members also had an opportunity to contribute to a joint school/community endeavor.

**NICHOLSON ELEMENTARY
SCHOOL
CRAWFORDSVILLE
NORMA SCHROEDER, TEACHER
GRADE 4**

Objective:

To disseminate information concerning energy conservation and to encourage community individuals to take specific steps to save energy.

Strategy:

After much discussion and deliberation the 4th grade students decided to formulate a pledge which would encourage residents to save energy. A plan was devised whereby students would visit homes and provide an opportunity for individuals to respond to the pledge.

Newspaper and radio publicity informed community residents about the project before the children embarked upon home visitation. As a further means of identification the class made energy saver badges which they wore when they contacted their neighbors and friends.

To become familiar with visitation procedures, the children practiced interviewing techniques in the classroom and then interviewed other personnel in the school building. They also worked in teams; and as a safety precaution, made plans to visit homes in their own neighborhood.

Spring vacation week was selected as the visitation period. Armed with pledge booklets, badges, and watts charts, the students made their calls. They gave participants the opportunity to sign the pledge, gave them a watts chart, and indicated that they would return to collect the booklets and determine whether the project encouraged the residents to conserve energy.

Following visitation week the students reported on their activities and commented on the reaction of the community residents. They had been prepared for

some refusals and found instead, a supportive acceptance. The experiences were positive and prompted the students to continue their interest in environmental activities.

**CENTRAL ELEMENTARY SCHOOL
MICHIGAN CITY
WILLIAM WICKE, TEACHER
GRADE 6**

Objective:

To provide structures whereby students can participate in legitimate change-producing activities which promote public awareness of energy conservation needs.

Strategy:

An energy conservation project was initiated in Central Elementary School, a Michigan City inner-city school, by 6th graders.

Planning for subsequent activities was begun with a series of open-ended discussions in which students had an opportunity to explore concepts related to causes, effects, and possible solutions to the energy crisis. As students became increasingly concerned about possible areas of action, they began to address themselves to methods and channels of action. As a result interviews were set up with representatives from the Mayor's office, the city council, and the Chamber of Commerce.

After some discussion, students decided to organize a club that would have a nominal membership fee. The club then engaged in a number of immediate activities. They drafted two resolutions for city council consideration and began efforts to get an energy conservation emblem printed on fluorescent orange paper. The emblem, which was later changed to "55 mph/68°" in order to comply to national and state law, was finally placed in a number of public places in order to gain publicity for the project. The club incorporated, sold stock, and formulated rules, duties, purposes and goals. They then began a sales campaign and launched an effort to get the emblem sold to interested persons not only in Michigan City but adjacent areas as well. A major goal was to eventually have at least 5,000 emblems placed in vehicles and on windows throughout the northern Indiana area.

As the project progressed, various community groups pledged support and assistance. Since the emblem and slogan was officially adopted by the city council, continued co-operation has occurred.

There was quite a boost of PRIDE to youngsters involved in the second year project as they received confirmation from both the Police and the U.S. Postal Departments that their 55 mph/68° emblems would be displayed in eighty official vehicles. The youngsters were also impressed with support provided by the business community; K-Mart alone gave more than 300 plants to complete an environmental investigation.

"We are happy with the feeling: YES, WE CAN DO SOMETHING ABOUT OUR CONDITION, NOW!"

Mr. William Wicke, sixth grade teacher for the project.

**INDIANAPOLIS PUBLIC SCHOOLS
SCHOOL 99
FREDONNA PENNINGTON,
LIBRARIAN
JAN CLARK, TEACHER
GRADES 1-8**

Objective:

To develop a school environmental awareness program that would point out the seriousness of energy shortages and encourage commitment to energy conservation.

Instructional Strategy:

As the result of action initiated by two teachers, a plan was devised to encourage and support classroom environmental education projects and activities. Leadership was provided by a steering committee composed of five students, the principal, and teachers. It became the responsibility of the steering committee to set direction, provide for inner-classroom communication, and formulate plans for a school-wide SAVE activity day.

Each classroom over 8 weeks developed activities and/or projects that were designed to contribute to an environmental awareness and energy conservation ethic. Students were creative in their approach to this assignment. The results included stories, poems, original songs, posters, badges, pantomimes, video-tapes, radio programs, and craft projects. The culminating

activity was a SAVE DAY program in the auditorium during which each classroom shared displayed projects and activities with other children.

Students were highly enthusiastic about their involvement and teachers were interested and cooperative. One teacher remarked, "The children are really concerned and they were glad to have an opportunity to do something and to have a way to express themselves." As a result, the primary objective of assisting students to become more aware of their responsibilities to conserve energy was reached and communication and co-operation within the school was fostered.

The second year SAVE project resulted in many student-initiated projects including: 1) a paper collection drive; 2) making posters, designing bulletin boards, writing plays, planting trees and shrubs; 3) passing out Pitch-In litter songs and plays.

Students and staff set aside the week of May 12-16 as SAVE Week and ended the project on SAVE Day (May 16) by planning an environmental program in the auditorium where each class discussed its role in the SAVE project.

**WEST WASHINGTON ELEMENTARY
SCHOOL
SALEM
STEVEN BROWN, TEACHER
SPECIAL EDUCATION**

Objective:
to create an awareness of energy conservation practices.

Strategy:
The special education class at West Washington Elementary School took an active role in assessing community attitude toward energy conservation. As their project developed the students:

- 1) constructed a questionnaire
 - 2) interviewed members of the community regarding energy practices
 - 3) compiled and reported the data
- Students hypothesized that there had been a decrease in the use of energy resources in the community but that the cost of using those energy resources had increased. The following questions were included in the survey:

- | | | | |
|----|---|-----|----|
| 1. | Have you used less heating fuel? | Yes | No |
| 2. | Have you driven less than last year? | | |
| 3. | Have you reduced your car speed? | | |
| 4. | Have you tried to seal cracks in your house to reduce air entrance? | | |
| 5. | Have you avoided fast car starts? | | |
| 6. | Do you use lights wisely? | | |
| 7. | Have you saved on energy bills? | | |

Survey results indicated that more than 60% of those interviewed had decreased their use of energy resources while 80% had applied personal energy conservation measures.

The project was a good learning experience for the children because they originated the ideas and participated fully in the implementation phase. They also benefited from the positive interaction with adults and the cooperation received from the families who were interviewed.

**KENDALLVILLE MIDDLE SCHOOL
KENDALLVILLE
LINDA MARTIN, TEACHER
GRADE 7**

Objective:

To encourage residents to ride bicycles as a means of transportation to conserve energy.

Strategy:

Students developed a project entitled "Legs in Action" which was aimed at creating an awareness of the values of bicycling. Slogans, radio advertisements, and a movie script were some of the tools used in the communications facet of the project. As an adjunct to this part of the activity, students also inquired about attitudes toward bicycling. They developed and administered a survey instrument which focused not only on the use of the bicycle as a vehicle for transportation but on car usage as well. Typical survey questions included:

1. How many miles a week do you ride a bike or walk? (estimate)
2. How many times a week do you ride in a car to a destination that is within walking distance?

Survey results showed that respondents did ride in cars quite often when the site was within walking

distance. The range was 1 to 21 times per week. Additionally the data showed that 16 of the 54 individuals surveyed drove 50 or more miles per week. Most of these persons, however, were driving for job-related purposes rather than pleasure.

The "Legs in Action" project provided a means whereby students could promote the values of bicycle riding. Although long range changes in behavior are not guaranteed, an interest and awareness of bicycling opportunities was stimulated as a result of the efforts of these students.

**KENNEDY-KING MIDDLE SCHOOL
GARY
MARK ISLEY, TEACHER
GRADE 7**

Objective:

To begin a recycling effort in a neighborhood while encouraging community co-operation and pride.

Strategy:

An almost single-handed organizational effort by Vito Cifaldi, a junior high student, resulted in the development of a project that enlisted the aid of many young people and adults. Concern about the aesthetics of a neighborhood prompted Vito to plan, organize, and assist in the implementation of a recycling program.

He contacted the Boy Scouts and the Girl Scouts in the area and received support from both groups. Mrs. Maureen Gianikos, Den Mother for Cub Scout Den 4, writes: "Vito attended the next meeting and talked to the boys about the harm of air-pollution and land pollution to their health. The boys, themselves, were very interested and seemed eager to carry out some of the pledges Vito suggested to them. . . . Vito has also offered to help organize a paper drive in our subdivision the last Saturday in April. During spring vacation pamphlets were passed out by the Scouts and he made arrangements to use a truck for the paper pick-up. The boys will work 8 hours that Saturday."

The Saturday paper drive was a successful venture. Although many hours were invested, the boys collected over a ton of newspapers. Other community improvement efforts were also successful. A neighborhood

woods was cleaned up, flowers were planted, and posters reminding residents to conserve resources were displayed. More importantly, however, an environmental ethic was established. Mrs. Gianikos, speaking of the boys' involvement, suggested that perhaps "there will be some carry-over to their own homes resulting from this neighborhood pledge." The efforts thus begun may trigger renewed interest in the maintenance and preservation of a community and stimulate interest in energy conservation.

MARION-ADAM, JR. HIGH SCHOOL
SHERIDAN
REX BOWMAN, TEACHER
KENT HARRIS, TEACHER
GRADE 7

Objective:

To gather and present data relative to promising energy conservation practices.

Strategy:

Concern for the depletion of oil reserves led to the investigation of the feasibility of the utilization of solar energy. Two students (Debbie Guttman and Myrna Goff) were prompted to gather data which describes some of the progress being made with regard to the harnessing of solar energy. A letter received from Dr. Karl W. Boer, Director of the Institute of Energy Conservation, and Dr. Maria Telkes, adjunct Professor of Energy Conservation, reads in part: "We sincerely appreciate your interest in the research work being performed at the Institute of Energy Conservation, University of Delaware. The primary objective of the research team that has been assembled is to provide an economically feasible approach to the use of solar energy for commercial heating, cooling, and electric power application in the 1970's.

Towards this end an experimental solar house, "Solar One", has been constructed adjacent to the University campus in order to provide the laboratory where our scientists can study and develop the integrated systems required to demonstrate the technical feasibility of the energy conversion program". As the result of gathering information and performing some experiments, the students concluded that solar energy offers many possibilities for the future. They conclude that it

is pollution free; the supply is nearly unlimited; it is not confined within national boundaries; and it is safe. It may be that the future for solar energy will be limited only by imagination and technical capabilities.

Making the assumption that home insulation can produce savings in energy consumption, two students (Beth Waggoner and Lisa Butcher) investigated the effectiveness of several types of insulation in a controlled experiment. They suggested that it is possible to save up to 25% on the heating oil bills in a one story house in the winter.

Additionally, insulation will also keep the house cooler in the summer, thus producing savings in the air conditioning costs.

Constructing a model house using an aquarium, the students tested the effectiveness of various types of insulation. In each case they discovered that polyurethane proved to be the best insulator in this experiment.

The research projects created an awareness of alternative solutions to energy problems and provided new information which could be disseminated within the school community. Through projects of this nature the need for a continual search for new and effective solutions to environmental projects is made apparent.

**CARROLL HIGH SCHOOL
FORT WAYNE
DENISE ALEXANDER, STUDENT**

Objective:

To design an environmental education program to help make students and staff more aware of environmental problems.

Strategy:

Denise Alexander, a junior at Carroll High School, organized an EARTH DAY Program to help make students in her school more aware of environmental issues. Her effort was a successful one and serves as proof that an individual student can actively do something to make others aware of problems confronting Indiana communities, the United States and the World. A summary of her report is found below:

EARTH DAY AT CARROLL HIGH SCHOOL.
Environmental problems is an area that directly

affects each one of us. Many people, however, are unaware of the serious tones of these problems. Realizing the need for student exposure to environmental education, Northrop High School declared April 24, 1975, as Earth Day.

The first step in planning such an event was to locate speakers. Dr. Clyde Hibbs, Chairman of the Educational Committee, Indiana Conservation Council, was the first man contacted. Through his generous efforts and the help of John McCory, a teacher of environmental education courses at Northrop High School in Fort Wayne, a list of speakers covering several aspects of environmental concern was developed. The enthusiasm shown by all made the job of finding volunteers an easy task. Without the type of cooperation received from these people and their various departments, this program could not have been put together. Lists were distributed throughout the building concerning speakers and their areas so that students would know which sessions they wanted to attend. Speakers, their organizations, and topics were as follows:

GARY BONTRAGER
INDIANA CONSERVATION OFFICER
"INDIANA WILDLIFE CONSERVATION"

THOMAS DUSTIN
IZAACK WALTON LEAGUE
"CONTROVERSY CONCERNING SOLID WASTE"

KAREN GRIGGS
IZAACK WALTON LEAGUE
"WATER QUALITY"

PAUL HUGHES
ALLEN COUNTY EXTENSION SERVICE
"SAFETY IN USING CHEMICALS"

GIL LATZ
ALLEN COUNTY PLANNING COMMISSION
"SEPTIC TANKS AND WATER POLLUTION"

DAN MCCAIN
ALLEN COUNTY SOIL AND WATER CONSERVATION DISTRICT
"SOILS AND LAND USE PLANNING"

DENNIS R. WINTERS
IZAACK WALTON LEAGUE, COALITION FOR THE
ENVIRONMENT
"NUCLEAR ENERGY-OPPOSING VIEWS"

Thanks to the cooperation of Mr. Lee Cox, Carroll principal, the many speakers, and all others who assisted, EARTH DAY was a success. Due to the workshop, students gained an insight into various environmental problems.

HOMESTEAD JR.-SR. HIGH
SCHOOL
FORT WAYNE
DOUGLAS WALDMAN, TEACHER
OUTDOOR EDUCATION

Objective:

To encourage student action to construct a nature center building and program on an outdoor classroom site and to secure community and school support.

Strategy:

Students designed a Nature Center building and program for their outdoor classroom and located funding in the Ft. Wayne Community to construct the building. Local environmental groups, parents, businesses and the news media were contacted to provide support for the S.A.V.E. Project. Approximately \$12,000 was collected by 150 Homestead students enabling them to construct the building according to the specifications essential for such a facility. Student labor not only reduced the costs but gave each participant an opportunity to do something positive for environmental education.

On August 10, 1975 dedication ceremonies were held and the building was officially opened as a Nature Center for the elementary and secondary school children. Several of the high school students were trained as Junior Naturalists. They will conduct classes in the new center and on the natural site which surrounds the lovely building. Other students will help manage the building and natural areas located near the site. As an example, students built a pond near the Center so that other students can experience pond life directly by using equipment which will be stored in the new environmental education facility.

Community, parent, administrative, teacher and student support will help to insure the success of this outstanding program as it is continued.

MISSISSINEWA HIGH SCHOOL
GAS CITY
RON HOWE, TEACHER
GRADE 11

Objective:

To provide an opportunity for students to take an active role in an energy conservation activity.

Strategy:

Two U.S. history classes taught by Ron Howe developed a program called "Feet Week" as a way of emphasizing the importance of energy conservation practices. In co-operation with the Twin City Chamber of Commerce, a series of contests were sponsored. On Monday of "Feet Week" a poster contest was conducted with a prize given for the winning poster. On Tuesday a prize was given to the person who came to school in the most unusual non-gasoline operated vehicle. On Wednesday the high school parking lot was closed and a 25¢ fee was imposed upon those who wished to park. The money collected for this activity was donated to the Vietnam War Memorial at Gas City Park. On Thursday a prize was awarded to the student that walked the farthest during the week.

The activities promoted by the students during "Feet Week" were effective in creating interest and involvement in energy conservation practices. One week before the contests students counted two hundred twenty-six cars in both the teachers' and students' parking lots. During "Feet Week", however, only one hundred and six cars were noted. Students hypothesized that with reduced driving and car pooling that week perhaps 70 to 80 gallons of gasoline were saved.

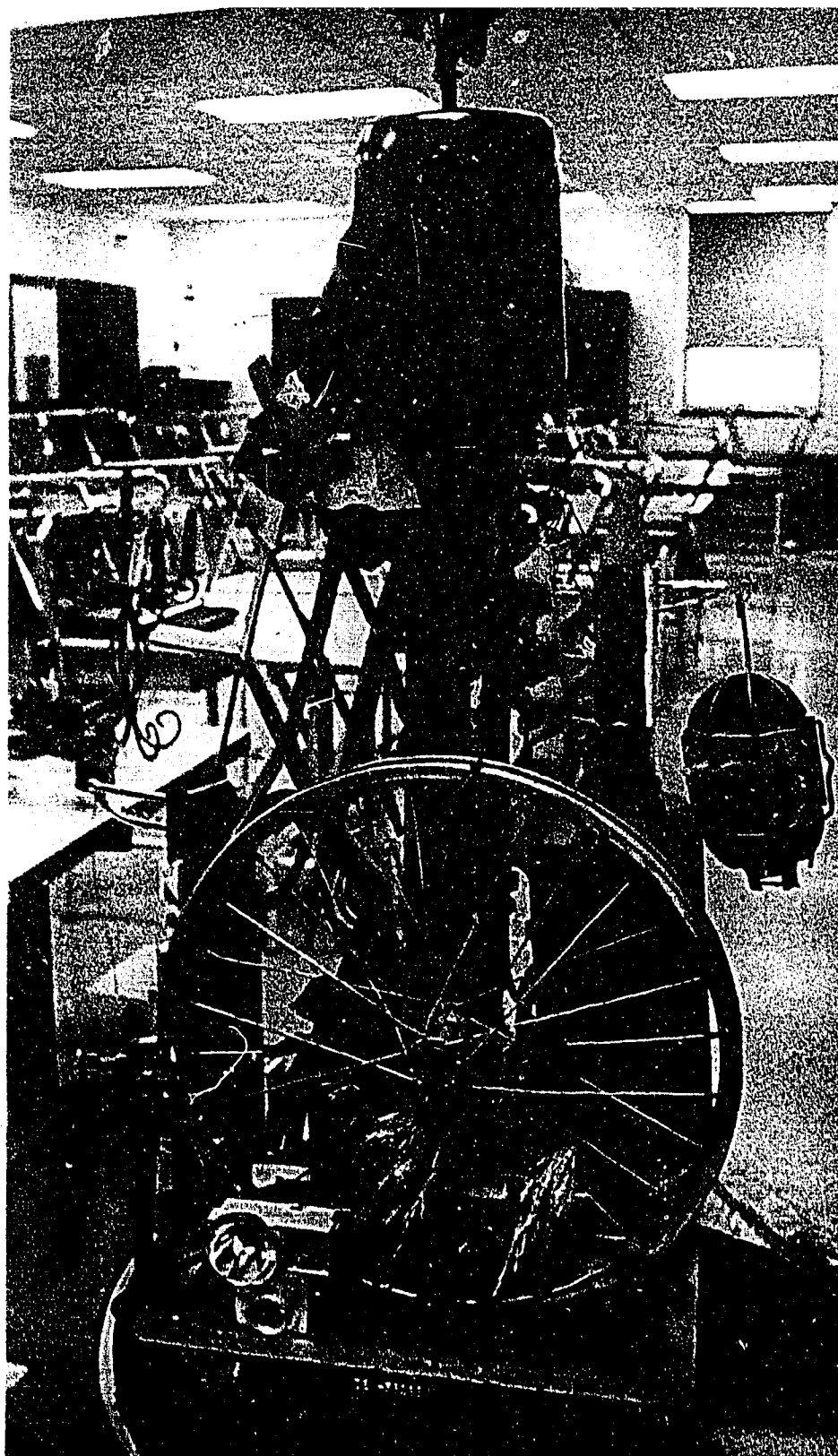
Although consumption and expenditures were lessened, creativity was not. Originality triumphed when three students came to school via a tricycle-powered bathtub. Not to be outdone were twenty teachers who, with the assistance of a police escort, came to school on a hay wagon pulled by several male faculty members. Other modes of transportation that proved to be effective included wagons, roller skates, bicycles, and pogo sticks.

For the second year project, Mississinewa High School initiated "Feet Week, Phase II." This project was similar to that of the first year and included the following activities: 1) walking contest; 2) poster contest; 3) closing of parking lot to cars; 4) unusual day; and 5) tune up, phase I, which was designed to help members of community tune-up their cars.

The students, teachers, administrators and community members all contributed to the success of "Feet Week". Students supported community environmental efforts by donating the proceeds from the project to the Twin City Parks.

There are many opportunities for providing students with direct involvement in community-oriented environmental tasks. Whether students focus on home, school, local community, state, or national environmental concerns, challenges for contributing to the solution of critical problems exist. The potpourri of ideas suggested below may serve as the starting point for the development of new SAVE projects. Additional creative approaches will be generated as educators and students examine local needs and resources.

Categories have been designated for Project SAVE in order to highlight specific types of activities; however, boundaries are necessarily flexible and therefore should not be interpreted as limitations to creativity. Emphasis should be placed upon initiation, involvement, and commitment of students in projects designed to contribute to the environmental well-being of the community.



III. Challenges for Student Involvement

SUGGESTIONS FOR SAVE PROJECTS

Community Documentation, Preservation and Restoration

- a. Work through the Mayor's office to jointly plan and implement a community beautification project.
- b. Work with appropriate groups to preserve or restore a historical site in the community.
- c. Plan and implement a series of informational presentations on the history of the community emphasizing ecological trends.
- d. Trace the historical development of the community and project future growth. Work through the local political unit, e.g. city council, mayor, city planner, etc., to jointly recommend future planning strategies for land use.
- e. Identify "Green Areas" in cities and develop a strategy for maintaining endangered ones.
- f. Develop a slide-tape or 8mm film of the history of the community emphasizing ecological concerns.
- g. Interview older members of the community in order to learn about environmental practices and changes. A history of the area could then be developed on the basis of the information.
- h. Research and reconstruct on a model scale the original community. Point out environmental characteristics of the community.
- i. Identify basic environmental issues in the community and make a past-present analysis. Propose future changes in keeping with sound ecological practices.

ENVIRONMENTAL IMPROVEMENT

- a. Monitor the water quality of water resources near the community and make the information available to appropriate sources.

- b. Study noise pollution within the community and make recommendations for changes, e.g., rerouting traffic, staggered time schedules, etc.
- c. Develop an environmental site on or near the school property and make recommendations for its use by the rest of the school.
- d. Study the wildlife in the area and design a wildlife improvement habitat plan.
- e. Design an "Earth Day" program for the school in conjunction with national Earth Day activities.
- f. Study man's impact on the aging process of a lake and encourage lake property owners to take action to solve the problem. Disseminate information to interested individuals or groups.
- g. Gather information on proposed environmental laws, resolutions, and ordinances and take appropriate action in support of those that are pertinent to the community.
- h. Create an environmental education A-V presentation dealing with a local problem and make it available to school and community groups.
- i. Design a dramatic production to illustrate the dependence of plants, animals and people upon water as a resource.
- j. Plan and implement projects to attract acceptable forms of wildlife to the school site.
- k. Develop a plan to help delay the zero supply date of a non-renewable resource and design a program to communicate the need for action.
- l. Design a project for communicating the need for action to arrest and/or reverse the depletion rate of a renewable earth resource.
- m. Conduct studies to determine the environmental impact of automobiles, boats or houses on a natural environment and design a program which could reduce this impact.

ENERGY CONSERVATION

- a. Work with parents to make an analysis of energy conservation practices within the home, e.g., insulation, weather-stripping, thermostat settings, use of electric appliances, etc. Develop a plan to conserve energy and chart actual savings in terms of energy and dollars.

- b. Co-operate with local mechanics to develop a car "tune-up" campaign. Special rates might be offered as part of the project plan.
- c. Investigate the feasibility of local bus service or alternative mass-transit systems for the community. Make the information available to the city council or appropriate political unit.
- d. Co-operate with the appropriate community groups to develop a pilot recycling center. The school might be used as a community recycling site.
- e. Create a school SAVE club and promote environmental projects and energy conservation practices.
- f. Survey the school and community to determine how energy is being misused in packaging.
- g. Develop, implement and/or project the impact of a plan to reduce the number of automobiles driven to school by encouraging car pools, walking, riding buses, riding bikes, etc.
- h. Develop media programs to inform students, parents, and community citizens about energy resources.
- i. Investigate existing community energy program(s) and develop a plan whereby students can actively participate in the program(s).
- j. Investigate various types of recreational activities in terms of energy consumption, develop energy conscience alternate suggestions, and evaluate the energy conservation which would result.
- k. Develop a checklist of energy conservation practices for the classroom or home and attempt to conserve energy by following these practices. (Example: Using both sides of paper, turning off all lights when leaving room, etc.)



IV. Resources for SAVE

FREE AND INEXPENSIVE MATERIALS

A vast reservoir of natural and human resources exists in most Indiana communities. These resources could become an integral part of SAVE projects. Teachers and students designing environmental education programs may wish to involve some of the agencies and individuals listed below in their projects:

A) **Business, Industry and Organizations**

Don't overlook industry, organizations, and businesses as potential supporters for SAVE projects. Several schools in Indiana have involved industry and businesses in planning SAVE projects. They can often provide resource persons, financial assistance, tours, material resources, and community support for activities that benefit the school and community.

B) **Cooperative Extension Service**

Each Indiana county seat has a Cooperative Extension Office. Staff from this office can provide teachers and students with maps, 4-H materials for projects in soils, wildlife, weather, conservation, etc. Consulting services are also available to assist with the planning of 4-H projects, clubs and environmental activities.

C) **Cooperative Extension Service Publication**

Cooperative Extension Service

Purdue University

West Lafayette, Indiana 47907

Ask for: *ENVIRONMENTAL EDUCATION, EDUCATION FOR THE SEVENTIES*. This publication lists curriculum materials, films, pollution games, lesson plans, resource agencies, etc. Price: \$3.50.

D) Environmental Quality Control, Inc.

EQC is a non-profit organization which represents major industries in Indiana. This organization can provide information concerning: 1) energy, air and water pollution legislation; 2) a bibliography of environmental materials; 3) information concerning efforts of Indiana industries to control pollution, etc. Write to:

Executive Director
Environmental Quality Control, Inc.
1220 Waterway Boulevard
Indianapolis, Indiana 46202

E) Governor's PRIDE Program

The Governor's PRIDE staff has lists of people and agencies who can: 1) Provide environmental and energy education materials; 2) Provide access to other state and national programs. (Keep America Beautiful, Johnny Horizon, Pitch-In, etc.) Write to:

Indiana Energy Office
Room 803 State Office Building
Indianapolis, Indiana 46204

F) Indiana Department of Public Instruction

This state agency is responsible for planning SAVE. It can also provide: 1) Copies of the state guidelines, TOTAL ENVIRONMENT EDUCATION. (This publication contains excellent ideas for student action projects.) 2) Access to environmental films; 3) Information about existing SAVE projects and 4) Consulting services to help write a SAVE project. Write to:

Project SAVE Committee
Division of Curriculum
Indiana Department of Public Instruction
120 West Market Street—10th Floor
Indianapolis, Indiana 46204

or

Environmental Education Consultant
Northern Regional Service Center
635 South Main Street
South Bend, Indiana 46623

G) Indiana State Board of Health

This state agency has free films, teaching materials, and access to environmental information about air, water, and noise pollution. Write to:

Health Education

Indiana State Board of Health

1330 West Michigan Street

Indianapolis, Indiana 46206

H) Mayor's Office or City Council

In many Indiana communities the mayor and his staff or the city council can provide teachers and students access to maps, free materials, information about sewage and water treatment facilities, future plans for city, etc. Local governmental officials may also provide opportunities for students to attend public hearings and testify on the behalf of an environmental issue.

I) Soil Conservation Service

Each county seat in Indiana has a SCS office. This federal agency can provide maps, films, free land use materials, teaching materials, and consulting services for planning gardens, school site beautification projects, nature centers or outdoor classrooms, etc.

J) Teachers, Parents, Students, and other Community Individuals

As teachers and students initiate a SAVE project, they should involve others in their school and community. People are a resource which can improve the quality of the program.

The above are examples of some of the many community and human resources available to educators and students. To list all resources would be an impossible task for the Project SAVE Committee. A search of the local community will reveal that many individuals and agencies are interested in their environment. Capitalize on these interests by involving people, young and old, in an Environmental Education Project. This involvement will help educate them about environmental issues and provide the support needed to implement SAVE programs.